

I claim:

1. A method for accurately calculating database space for an IMS OSAM dataset the method comprising the steps of:

5 monitoring an order in which a large physical sequential data file, which is an IMS OSAM dataset, is stored to multiple logical devices, each of which has an allocatable volume;

analyzing the large physical sequential data file to determine a volume of said file stored in the allocatable volume of each of the multiple logical devices;

10 determining a total volume stored for the large physical sequential data file from said determined volumes; and

determining if the total volume exceeds a predetermined threshold which is a percentage of the total allocatable volumes of said multiple logical devices.

15 2. The method of claim 1 further comprising the step of:
generating an exception report to inform a user that the total volume exceeds the predetermined threshold.

3. The method of claim 2 further comprising the step of:
automatically emailing the exception report to the user.

4. The method of claim 2 further comprising the step of:
reducing the size of the large physical sequential data file.

20 5. The method of claim 1 wherein the IMS OSAM dataset is guaranteed space and the multiple logical devices are a plurality of disk memory storage devices.

6. The method of claim 5 wherein said step of analyzing the large physical sequential data file further comprises:

25 performing an IDCAMS LISTCAT against the data file to determine if the data file is guaranteed space.

7. The method of claim 5 wherein said step of analyzing the large physical sequential data file further comprises:

executing a DCOLLECT utility against a volume table of contents on each of said disks to extract information about the physical file stored on each disk.

5 8. The method of claim 5 wherein said step of monitoring further comprises:
performing a SUBLISTC routine for the dataset and returning a gts flag, last volume, total number of volumes, and a predetermined number of occurrences of volume serial numbers for the dataset.

10 9. The method of claim 8 wherein said step of monitoring further comprises:
reading an output from the SUBLISTC routine and returning gts flag and last volume information.

10. The method of claim 5 further comprising the step of:
executing an IEHLISTR routine.

15 11. The method of claim 10 further comprising the steps of:
reading an output from the IEHLISTR subroutine; and
returning total free cylinder information.

12. An apparatus for accurately calculating database space for an IMS OSAM dataset, the apparatus comprising:

20 means for monitoring an order in which a large physical sequential data file, which is
an IMS OSAM dataset, is stored to multiple logical devices, each of which has an allocatable volume;

means for analyzing the large physical sequential data file to determine a volume of said file stored in the allocatable volume of each of the multiple logical devices;

25 means for determining a total volume stored for the large physical sequential data file
from said determined volumes; and

means for determining if the total volume exceeds a predetermined threshold which is a percentage of the total allocatable volumes of said multiple logical devices.

13. The apparatus of claim 12 further comprising:

means for generating an exception report to inform a user that the total volume
5 exceeds the predetermined threshold.

14. The apparatus of claim 13 further comprising:

means for automatically emailing the exception report to the user.

15. The apparatus of claim 14 further comprising:

a display to display the exception report.

10 16. The apparatus of claim 12 wherein the IMS OSAM dataset is guaranteed space and the multiple logical devices are a plurality of disk memory storage devices which are part of a multiple virtual storage mainframe computer system.

17. The apparatus of claim 16 wherein said means for analyzing the large physical sequential data file further comprises:

15 means for performing an IDCAMS LISTCAT against the data file to determine if the data file is guaranteed space.

18. The apparatus of claim 16 wherein said means for analyzing the large physical sequential data file further comprises:

means for executing a DCOLLECT utility against a volume table of contents on each
20 of said disks to extract information about the physical file stored on each disk.

19. The apparatus of claim 16 wherein said means for monitoring further comprises:

means for performing a SUBLISTC routine for the dataset and returning a gts flag,
last volume, total number of volumes, and a predetermined number of occurrences of volume
25 serial numbers for the dataset.

20. The apparatus of claim 19 wherein said means for monitoring further comprises:

means for reading an output from the SUBLISTC routine; and

means for returning gts flag and last volume information.

5 21. The apparatus of claim 16 further comprising:

means for executing an IEHLISTR routine.

22. The apparatus of claim 21 further comprising:

means for reading an output from the IEHLISTR subroutine; and

means for returning total free cylinder information.

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